



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

73552 7590 08/14/2008

Stolowitz Ford Cowger LLP
621 SW Morrison St
Suite 600
Portland, OR 97205

EXAMINER

JEAN GILLES, JUDE

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 08/14/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/723,120

11/25/2003

David Tanner

2705-0738

1268

TITLE OF INVENTION: METHOD AND SYSTEM FOR INTERACTIVELY CONFIGURING A NETWORK DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	11/14/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

73552 7590 08/14/2008

Stolowitz Ford Cowger LLP
621 SW Morrison St
Suite 600
Portland, OR 97205

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/723,120 11/25/2003 David Tanner 2705-0738 1268

TITLE OF INVENTION: METHOD AND SYSTEM FOR INTERACTIVELY CONFIGURING A NETWORK DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
-------------	--------------	---------------	---------------------	----------------------	------------------	----------

nonprovisional NO \$1440 \$0 \$0 \$1440 11/14/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
----------	----------	----------------

JEAN GILLES, JUDE 2143 709-220000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,120	11/25/2003	David Tanner	2705-0738	1268
73552	7590	08/14/2008	EXAMINER	
Stolowitz Ford Cowger LLP 621 SW Morrison St Suite 600 Portland, OR 97205			JEAN GILLES, JUDE	
			ART UNIT	PAPER NUMBER
			2143	
			DATE MAILED: 08/14/2008	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 774 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 774 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

10/723,120

Applicant(s)

TANNER ET AL.

Examiner

Art Unit

JUDE J. JEAN GILLES

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/11/2008.
2. ☒ The allowed claim(s) is/are 1,2,4-18,24-28,30-34,36,37 and 47-56.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

/Jude J Jean-Gilles/
Examiner, Art Unit 2143

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Mike Cofield on August 4th, 2008.

IN THE CLAIMS:

The application includes claims 1, 2, 4-18, 24-28, 30-34, 36, 37, and 47-56 prior to proposing this amendment.

Claims 1, 2, 4-18, 24-28, 30-34, 36, 37, and 47-56 are pending after entering this amendment.

Please amend claims 24-26, 33, 34, 36, 37, 49, 50, and 51 as follow:

1. (Previously presented) A system comprising:
 - a computer communicatively coupled to a network device over a network, the computer operable to:
 - display a document including editable text corresponding to a local copy of a configuration file for the network device, the editable text representing a plurality of different objects that each control different functionality of the network device;
 - receive a user input modifying a selected portion of the text that corresponds to one of the objects;
 - send a first code component to said network device;

receive a second code component from said network device in response to said sending said first code component;

initiate an automatic completion of a user inputted command, wherein said first code component comprises a textual fragment of said user inputted command, wherein said second code component comprises the completed command in its entirety, and wherein said completed command in its entirety is added to said text;

wherein the document is retrieved from the network device in response to a user request or written by a user; and

exchange communications with the network device prior to receiving a subsequent user input that modifies a different portion of the text that corresponds to a different one of the objects, the communications for:

dynamically modifying a remote copy of the configuration file that is stored on the network device without exchanging an entire copy of the configuration file between the computer and the network device; and

generating incremental configuration changes in a network device.

2. (Previously presented) The system of claim 1 wherein the network device is reconfigured dynamically and interactively while the user modifies the text displayed by the computer.

3. (Canceled)

4. (Previously presented) The system of claim 1 further comprising:
the network device to send the completed command to the computer for synchronizing changes to the local copy of the configuration file with changes to the remote copy of the configuration file; and

the computer to receive the completed command and update the displayed document based on the completed command.

5. (Previously Presented) The system of claim 4 wherein the document displays the textual fragment when the network device initiates reconfiguration based on the complete command.

6. (Previously presented) The system of claim 1 wherein the network device is configured to perform syntax checking on edited lines transferred from the computer responsive to the communication exchange.

7. (Previously presented) The system of claim 1 wherein the computer is operable to use a Command Line Interface (CLI) parser installed on the network device to process the user request.

8. (Previously presented) The system of claim 7 wherein the computer does not emulate a replication of the Command Line Interface (CLI) parser of the network device.

9. (Previously presented) The system of claim 8 wherein the computer leverages the command correction capability of the network device so that changes to a command-set used for command correction on the network device does not require an update to a command-set on the computer.

10. (Previously presented) The system of claim 1 wherein the computer is further operable to send the selected portion of the text to the network device without sending different unchanged portions of the text.

11. (Previously presented) The system of claim 1 further comprising:
the computer to form a transport object;
the computer to generate code indicating the modifications to the selected portion of the text; and

the computer to dispose said transport object containing the code within a transport medium.

12. (Previously presented) The system of Claim 11 wherein said code comprises a command configured to instruct the network device to make corresponding modifications to the remote copy of the configuration file.

13. (Previously presented) The system of Claim 12 wherein said command is rendered in Command Line Interface format.

14. (Previously presented) The system of Claim 11 wherein said transport medium comprises an interface and wherein said interface substantially complies with Common Object Request Broker Architecture.

15. (Previously presented) The system of Claim 14 wherein the computer is configured to form said transport object by embedding said code within a set of tags and wherein said tags comprise Extensible Markup Language markers.

16. (Previously presented) The system of Claim 11 wherein said transport medium comprises a serial line interface.

17. (Previously presented) The system of Claim 11 wherein said transport medium comprises Telnet.

18. (Previously presented) The system of Claim 11 wherein said transport medium comprises Secure Shell.

19-23. (Cancelled)

24. (Currently amended) A computer readable storage medium storing a program having instructions, the instructions when executed by a processor cause a computer to ~~based system for interactively configuring a network device, comprising:~~
provide an application for providing a development environment application;
change a document using a text editing tool co-functional with said development environment application, for editing a document wherein said document comprises a configuration for said network device and wherein said configuration is retrieved from said network device in response to a user request;
display said document on a user interface co-functional with said development environment application, ~~for displaying said document and~~ allow ~~allowing said a~~ user to make a change to said document via said user interface;
generate code corresponding to said change via a code generator co-functional with said user interface, ~~for generating code corresponding to said change; and~~
send said change to said network device via a communication module co-functional with said code generator, ~~for sending said change to said device wherein said communication module is operable to change is made to said document by a process comprising:~~
send ~~sending~~ a first code component from said communication module to said network device; and
receive ~~receiving~~ a second code component from said network device at said communication module in response to said first code component; and
wherein said user request comprises at least one request selected from the group comprising:
initiate ~~initiating~~ an automatic completion of a command entered by said user into said document, wherein said first code component comprises a textual fragment of said command, wherein said second code component comprises said command in its entirety, and wherein said command in its entirety is added to said text;
request ~~requesting~~ a list of commands that are appropriate to a position in said text, wherein said first code component requests said list, wherein said second code component comprises said list, wherein said list is displayed to said user,

and wherein said user may select a command from said list for insertion into said text at said position; and

initiate ~~initiating~~ a syntax check, wherein said first code component comprises said request for said syntax check, wherein said second code component comprises a detection of an error in said document, and wherein said document is updated to display said error.

25. (Currently amended) The computer readable storage medium ~~based system~~ as recited in Claim 24 wherein said change in said configuration is sent without sending an unchanged component of said configuration to said network device and wherein said communication module is further operable to ~~sending said change to said network device comprises:~~

form ~~forming~~ a transport object wherein said transport object contains code comprising said change; and

dispose ~~disposing~~ said transport object within a transport medium wherein said transport medium comprises ~~a medium selected from the group comprising:~~ an interface and wherein said interface substantially complies with Common Object Request Broker Architecture, the transport medium selected from the group comprising;

a serial line interface;

Telnet; and

Secure Shell.

26. (Currently amended) The computer readable storage medium ~~based system~~ as recited in Claim 25 wherein the instructions when executed by a processor, ~~further cause a computer to further comprising;~~

highlight a part of said document to implement said change using a highlighting module to indicate which parts of said document have been modified ~~for selecting a part of said document to implement said change, and for indicating which parts of said document have been modified;~~ and

restore said configuration to a state prior to implementing said change using an
~~undo manager for restoring said configuration to a state prior to implementing said~~
~~change.~~

27. (Previously presented) A method comprising:

displaying a document including text corresponding to a configuration file stored on a remotely located network device, the text representing multiple different objects that each control different operational characteristics of the remotely located network device;

receiving a user input modifying a selected portion of the text that corresponds to a first subset of the objects;

sending one or more communications over a network to the network device prior to receiving a subsequent user input that modifies a different portion of the text that corresponds to a second different subset of the objects, the communications configured to cause the network device to dynamically modify the configuration file that is stored on the network device;

sending a first code component to said network device;

receiving a second code component from said network device in response to said sending said first code component;

initiating an automatic completion of a user inputted command, wherein said first code component comprises a textual fragment of said user inputted command, wherein said second code component comprises said command in its entirety, and wherein said command in its entirety is added to said text; and

after performing command completion responsive to receiving the second code component, updating a display of the textual fragment with the command in its entirety to synchronize the display with the configuration file located on the network device.

28. (Previously presented) The method of claim 27 wherein the communications include payload data configured to control only a subset of the operational characteristics that corresponds to the first subset of the objects such that

the method does not require transferring an entire copy of the configuration file to or from the network device to elicit the dynamic modification of the configuration file.

29. (Cancelled)

30. (Previously presented) The method of claim 27 further comprising:
forming a transport object for sending the communications, wherein said transport object contains code configured to control dynamic modification of the configuration file; and
disposing said transport object within a transport medium.

31. (Previously presented) The method of claim 30 wherein said code comprises a command and wherein said command is rendered in Command Line Interface format.

32. (Previously presented) The method of claim 30 wherein said transport medium comprises a medium selected from the group consisting of:
an interface wherein said interface substantially complies with Common Object Request Broker Architecture;
a serial line interface;
Telnet; and
Secure Shell.

33. (Currently amended) ~~An apparatus-computer based system~~, comprising:
means for displaying a document including text to a local user upon receiving a configuration of a remote network device, wherein said document comprises the configuration for said network device in a text format and wherein said computer is coupled to said network device;
means for allowing said user to modify said text comprising said document;

means for interacting with the remote network device to provide the modified text to the remote network device, wherein said interacting means comprises;

means for sending a first code component comprising at least a portion of the modified text to said network device;

means for receiving a second code component from said network device in response to said sending said first code component;

means for initiating an automatic completion of a user inputted command, wherein said first code component comprises a textual fragment of said user inputted command, wherein said second code component comprises said command in its entirety, and wherein said command in its entirety is added to said text; and

means for updating a display of the textual fragment with the command in its entirety to synchronize the display with the configuration file located on the network device after performing command completion responsive to receiving the second code component.

34. (Currently amended) The apparatus ~~computer based system~~ as recited in Claim 33 wherein said modified text includes a syntax error and wherein the second code component comprises the portion of the modified text with the syntax error corrected.

35. (Cancelled)

36. (Currently amended) The apparatus ~~computer based system~~ as recited in Claim 34 further comprising:

means for forming a transport object wherein said transport object contains the first code component; and

means for disposing said transport object within a transport medium.

37. (Currently amended) The apparatus ~~computer based system~~ as recited in Claim 36 wherein the computer is configured to interact with the remote network device

to provide the changed text independently of whether the computer detects that the changed text comprises an incomplete command and wherein said transport medium comprises a medium selected from the group consisting of:

- an interface and wherein said interface substantially complies with Common Object Request Broker Architecture;
- a serial line interface;
- Telnet; and
- Secure Shell.

38-46. (Cancelled)

47. (Previously presented) The system of claim 1 wherein the computer is configured to communicate directly with the network device such that said direct communications are not affected by or exchanged via an intermediary data processing module that generates configuration data in the form of a list or directory and restricts configuration modification to user selections from said list or directory.

48. (Previously presented) A system comprising:

- a computer communicatively coupled to a network device over a network, the computer operable to:
 - display a document including editable text corresponding to a local copy of a configuration file for the network device, the editable text representing a plurality of different objects that each control different functionality of the network device;
 - receive a user input modifying a selected portion of the text that corresponds to one of the objects wherein the user input represents a textual fragment to be automatically completed by the computer;
 - send a first code component to the network device, the first code component representing the textual fragment;

receive back a second code component, the second code component comprising a complete command that corresponds to the textual fragment;

exchange communications with the network device prior to receiving a subsequent user input that modifies a different portion of the text that corresponds to a different one of the objects, the communications for:

dynamically modifying a remote copy of the configuration file that is stored on the network device without exchanging an entire copy of the configuration file between the computer and the network device; and

generating incremental configuration changes in a network device; and
updating the displayed document to include the complete command.

49. (Currently amended) A system comprising:

a computer communicatively coupled to a network device over a network, the computer operable to:

display a document including editable text corresponding to a local copy of a configuration file for the network device, the editable text representing a plurality of different objects that each control different functionality of the network device;

receive a user input modifying a selected portion of the text that corresponds to one of the objects, wherein the user input selects a position within the editable text;

exchange communications with the network device prior to receiving a subsequent user input that modifies a different portion of the text that corresponds to a different one of the objects, the communications to ~~for~~:

dynamically modify ~~modifying~~ a remote copy of the configuration file that is stored on the network device without exchanging an entire copy of the configuration file between the computer and the network device; and

generate ~~generating~~ incremental configuration changes in a network device;

send a first code component requesting a list of commands that are appropriate to the user selected position within the editable text;

receive back a second code component representing said list of commands;

display the list of commands for user selection; ~~and~~
responsive to receiving a user selection from the list, insert a corresponding one
of the commands from the list into said text at said position~~[[.]]; and~~
initiate an automatic completion of a user inputted command, wherein said first
code component comprises a textual fragment of said user inputted command, wherein
said second code component comprises the completed command in its entirety, and
wherein said completed command in its entirety is added to said text.

50. (Currently amended) A system comprising:
a computer communicatively coupled to a network device over a network, the
computer operable to:
display a document including editable text corresponding to a local copy of a
configuration file for the network device, the editable text representing a plurality of
different objects that each control different functionality of the network device;
receive a user input modifying a selected portion of the text that corresponds to
one of the objects;
initiate an automatic completion of a user inputted command, wherein said user
inputted command is incomplete and wherein said completed command in its entirety is
added to said text;
exchange communications with the network device prior to receiving a
subsequent user input that modifies a different portion of the text that corresponds to a
different one of the objects, the communications ~~to~~ for:
dynamically modify ~~modifying~~ a remote copy of the configuration file that
is stored on the network device without exchanging an entire copy of the configuration
file between the computer and the network device; and
generate ~~generating~~ incremental configuration changes in a network
device;
send a first code component to the network device responsive to the user
modifying the text, the first code component requesting a syntax check by the network
device on the modified text; and

receive back a second code component indicating a syntax error in the modified text; and

display the syntax error.

51. (Currently amended) An apparatus comprising:

one or more processors; and

a memory coupled to the processors comprising instructions executable by the processors, the processors operable when executing the instructions to:

display an editable document representing a local copy of a configuration file stored on a remote network device, the editable document representing a plurality of different objects that each control different functionality of the network device;

detect an input modifying the editable document;

responsive to detecting the input, send a first code component representing a command fragment over a network and to the remote device;

receive back a second code component over the network and from said network device, the second code component including a command corresponding to the command fragment; [[and]]

initiate an automatic completion of an input modifying the editable text, the automatic completion to update a display of the command fragment with the command in its entirety to synchronize the displayed editable document with the reconfigured configuration file located on the network device; and

exchange communications with the network device prior to receiving a subsequent input modifying a different portion of the text that corresponds to a different one of the objects, the communications for:

dynamically modifying a remote copy of the configuration file that is stored on the network device without exchanging an entire copy of the configuration file between the computer and the network device; and

generating incremental configuration changes in a network device.

52. (Previously Presented) The apparatus of claim 51,

wherein the second code component includes an indication that the configuration file stored on the remote network device has been modified according to the corresponding command; and

wherein said modification of the configuration file stored on the remote network device occurs before the second code component is received and before the editable document is updated with the command in its entirety.

53. (Currently amended) The apparatus of claim 51 ~~wherein the processors are further operable when executing the instructions to initiate an automatic completion of an input modifying the editable text~~, wherein said first code component comprises a textual fragment of a predetermined textual modification and the second code component comprises the textual modification in its entirety, and wherein the textual modification is added to the text.

54. (Previously Presented) The apparatus of claim 51 wherein the processors are further operable when executing the instructions to:

modify the configuration file stored on the remote device incrementally by repeating iterations of:

detecting an input modifying the editable document;

responsive to detecting the input, sending a n th code component to the remote device;

receiving back an $(n + 1)$ th code component over the network and from said network device, the $(n + 1)$ th code component responsive to the n th code component; and

updating a display of the editable document to reflect the network device response.

55. (Previously Presented) The apparatus of claim 54 wherein the n th code component represents at least a request for a list of commands that correlate to an

indicated position within the editable document and wherein the (n+1)th code component represents at least said list of commands.

56. (Previously Presented) The apparatus of claim 54 wherein the nth code component represents at least a request for a syntax check of the modified editable document and wherein the (n+1)th code component represents at least an indication of a syntax error in the modified text.

ALLOWED CLAIMS

2. ***Claims 1, 2, 4-18, 24-28, 30-34, 36, 37, and 47-56 are allowed.***

Conclusion

3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

Art Unit: 2143

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

/Jude J Jean-Gilles/

Examiner, Art Unit 2143

JJG

August 12, 2008